TIER TWO INSTRUCTIONS

SEE AZ SUPPLEMENTAL GUIDANCE ON PAGES 6 & 7

GENERAL INFORMATION

Submission of this Tier Two form is required by the Arizona Emergency Planning and Community Right-to-Know Act, which implements Title III of the federal Superfund Amendments and Reauthorization Act of 1986. The purpose of the Tier Two form is to provide State, Tribal and local officials and the public with specific information on hazardous chemicals present at your facility during the past year. *Note 1, Page 6

CERTIFICATION (AZ Trends #7)

The owner or operator or the officially designated representative of the owner or operator must certify that all information included in the Tier Two submission is true, accurate and complete. On the first page of the Tier Two report enter your full name and official title. Sign your name and enter the current date. Also, enter the total number of pages included in the Confidential and Non-Confidential Information Sheets as well as all attachments. Submissions to the Commission, LEPC and fire department with jurisdiction over the facility must each contain an original signature on at least the first page. Subsequent pages must contain either an original signature, a photocopy of the original signature, or a signature stamp. Each page must contain the date on which the original signature was affixed to the first page of the submission and the total number of pages in the submission. Be sure to identify a facility point of contact should there be questions concerning your submission.

YOU MUST PROVIDE ALL INFORMATION REQUESTED ON THIS FORM TO FULFILL TIER TWO REPORTING REQUIREMENTS.

WHO MUST SUBMIT THIS FORM

Arizona Revised Statutes (A.R.S.) 26-350 requires that the owner or operator of a facility submit this Tier Two form to the Arizona State Emergency Response Commission (AZSERC), appropriate Local Emergency Planning Committee (LEPC), and fire department with jurisdiction over the facility.

This requirement applies to the owner or operator of <u>any</u> facility that is required, under regulations implementing the Occupational Safety and Health Act of 1970, to prepare <u>or have available</u> a Material Safety Data Sheet (MSDS) for a hazardous chemical present at the facility. MSDS requirements are specified in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, found in Title 29 of the Code of Federal Regulations at 1910.1200.

WHAT CHEMICALS ARE INCLUDED

You must report the required information on this Tier Two form for each hazardous chemical present at your facility in quantities equal to or greater than established reporting thresholds, unless the chemicals are excluded under Section 311(e) of Title III. Hazardous chemicals are any substance for which your facility must maintain an MSDS under OSHA's Hazard Communication Standard. Included are: fuels, oils, metals ores, nuisance dusts as well as any chemical that presents a physical or health hazard.

WHAT CHEMICALS ARE EXCLUDED

This form does not have to be submitted if all of the chemicals located at your facility are excluded under Section 311(e) of Title III.

Section 311(e) of Title III excludes the following substances:

(I) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration

- (II) Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions or use:
- (III) Any substance to the extent it is used for personal, family or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public;
- (IV) Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual;
- (V) Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer. OSHA regulations, Section 1910.1200(b), stipulate exemptions from the requirement to prepare or have available an MSDS. *Note 2 Page 6.

REPORTING THRESHOLDS

Minimum thresholds have been established for Tier Two reporting under Title III, Section 312, These thresholds are as follows:

For Extremely Hazardous Substances (EHS) designated under section 302 of Title III, the reporting threshold is 500 pounds (or 227 kg.) or the threshold planning quantity (TPQ), whichever is lower;*Note 3 Page 6

For all other hazardous chemicals for which facilities are required to have or prepare an MSDS, the minimum reporting threshold is 10,000 pounds (or 4,540 kg.).

You need to report hazardous chemicals that were present at your facility at any time during the previous calendar year at levels that equal or exceed these thresholds. For instructions on threshold determination for components of mixtures, see "What About Mixtures?" on page 2 of these instructions.

A requesting official may limit the responses required under Tier Two by specifying particular chemicals or groups of chemicals. Such requests apply to hazardous chemicals regardless of established thresholds.

SEE AZ SUPPLEMENTAL GUIDANCE ON PAGES 6 & 7

INSTRUCTIONS

Please read these instructions carefully. Print neatly or type all responses.

WHEN TO SUBMIT THIS FORM

Owners/operators of facilities that have hazardous chemicals on hand in quantities equal to or greater than set threshold levels must obtain and submit Tier Two forms by March 1 of each year.

WHERE TO SUBMIT THIS FORM

Send completed Tier Two form(s) to each of the following organizations: *Note 1, Page 6

- 1. Arizona Emergency Response Commission.
- 2. Your Local Emergency Planning Committee.
- The fire department with jurisdiction over your facility.

By use of a cover letter provide name and telephone number of your facility compliance point of contact. Also indicate to which fire dept./district you submitted this report. *Note 10, Page 6

If your Tier Two responses require more than one page use additional forms and fill in the page number at the top of the form. See certification requirements page 1.

PENALTIES

Any owner or operator who violates any Tier Two reporting requirements shall be liable to the United States for a civil penalty of up to \$25,000 for each such violation. Each day a violation continues shall constitute a separate violation.

FACILITY IDENTIFICATION: (AZ TRENDS #2a)

Enter the full name of your facility (and company identifier where appropriate).

Enter the full street address or state road. If a street address is not available, enter other appropriate identifiers that describe the physical location of your facility (e.g., latitude and longitude). Include city, county, state, and zip code. Provide facility mail address, if different than owner/operator (2b), below **SIC code** and **Dun & Brad number** blocks.

Enter the primary Standard Industrial Classification (SIC) code and the Dun & Bradstreet number for your facility. The financial officer of your facility should be able to provide the Dun & Bradstreet number. *Note 4, Page 6.

OWNER/OPERATOR: (AZ TRENDS #2b)

Enter the owner's or operator's full name, mailing address, and phone number. Also enter Point of Contact (POC) for this report if different.

EMERGENCY CONTACT: (AZ TRENDS #2c)

Enter the name, title, and work phone number of at least one local person or office who can act as a referral if emergency responders need assistance in responding to a chemical accident at the facility. Provide an emergency phone number where such emergency information will be available 24 hours a day, every day. This requirement is mandatory. The facility must make some arrangement to ensure that a 24 hour contact is available.

REPORTING PERIOD: (AZ TRENDS #2d)

Enter the appropriate calendar year, beginning January 1 and ending December 31.

IDENTICAL INFORMATION:

Check the box indicating information, located below the emergency contacts on the Tier Two form, if the current chemical information being reported is identical to that submitted last year. *Note 5, Page 6.

CHEMICAL INFORMATION: Description, Hazards, Amounts, and Locations

The main section of the Tier Two form requires specific information on amounts and locations of hazardous chemicals, as defined in the OSHA Hazard Communication Standard.

If you choose to indicate that all of the information on a specific hazardous chemical is identical to that submitted last year, check the appropriate optional box provided at the right side of the storage codes and locations on the Tier Two form.

What units should I use?

Calculate all amounts as weight in pounds. To convert gas or liquid volume to weight in pounds, multiply by an appropriate density factor.

What about mixtures?

If a chemical is part of a mixture, *you have the option* of reporting either the weight of the entire mixture or only the portion of the mixture that is a particular hazardous chemical. See 1a on the following page.

The option used for each mixture must be consistent with the option used in your Section 311 reporting which required submission of chemical lists and/or MSDSs. *Note 11, page 7

Because EHSs are important to Section 303 planning, EHSs have lower thresholds. The amount of an EHS at a facility (both pure EHS substances and EHSs in mixtures) must be aggregated for purposes of threshold determination. It is suggested that the aggregation calculation be done as a first step in making the threshold determination. Once you determine whether a threshold for an EHS has been reached, you should report either the total weight of the EHS at your facility, or the weight of each mixture containing the EHS.

See 1a on the following page.

CHEMICAL DESCRIPTION: (AZ TRENDS #3)

- Enter the Chemical Abstract Service registry number (CAS). For mixtures, enter the CAS number of the mixture as a whole if it has been assigned a number distinct from its constituents. For a mixture that has no CAS number, leave the item blank or (report the CAS numbers of as many constituent chemicals as possible). Arizona prefers 1a below be done rather than the above option in parentheses.
- 1a. Submit <u>current</u> material safety data sheets (MSDS) for mixtures containing two or more hazardous chemicals. For single hazardous chemical mixtures enter the CAS and percentage (or percentage range) of the hazardous chemical, e.g. 93% Sulfuric Acid. See first example on page 4 for inventory section reporting range determination. This is an Arizona specific request to facilitate emergency planning/response requirements.

If you are withholding the name of a chemical in accordance with criteria specified in Title III, Section 322, enter the generic class or category that is structurally descriptive of the chemical (e.g., list toluene diisocyanate as organic isocyanate) and check the box marked Trade secret. Trade secret information should be submitted to EPA and must include a substantiation. Please refer to EPA's final regulation on trade secrecy (53 FR 28772, July 29, 1988) for detailed information on how to submit trade secrecy claims.

- Enter the chemical name or common name of each hazardous chemical.
- Check box for All applicable descriptors: pure, mixture; solid, liquid, and/or gas; and whether the chemical is or contains an EHS. A minimum of two boxes must be checked. Specify EHS solids in powder form (particle size less than 100 microns).
- If the chemical is a mixture containing an EHS, enter the chemical name of each EHS in the mixture.

EXAMPLE

You have pure chlorine gas on hand, as well as two mixtures that contain liquid chlorine. You write "chlorine" and enter the CAS number. Then you check "pure", "mix", "liquid", gas, and "EHS".

PHYSICAL AND HEALTH HAZARDS: (AZ TRENDS #4)

For each chemical you have listed, check <u>all</u> the physical and health hazard boxes that apply. These hazard categories are defined in 40 CFR 370.2. The two health hazard categories and three physical hazard categories are a consolidation of the 23 hazard categories defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200. A minimum of one box must be checked.

*Note 6 page 6.

Hazard Category Comparison For Reporting Under Sections 311 and 312		
EPA's <u>Hazard Categories</u>	OSHA's <u>Hazard Categories</u>	
Fire Hazard	Flammable Combustible Liquid Pyrophoric Oxidizer	
Sudden Release of Pressure	Explosive Compressed Gas	
Reactive	Unstable Reactive Organic Peroxide Water Reactive	
Immediate (Acute) Health Hazards	Highly Toxic Toxic Irritant Sensitizer Corrosive	
	Other hazardous chemicals with an adverse effect with short term exposure.	
Delayed (Chronic) Health Hazard	Carcinogens	
Troditi Hazaru	Other hazardous chemicals with an adverse effect with long term exposure.	

INVENTORY: (AZ TRENDS #5)

MAXIMUM AMOUNT

- For each hazardous chemical, estimate the greatest amount present at your facility on any single day during the reporting period. See example on page 4.
- 2. Find the appropriate range value code in Table I.
- 3. Enter the range value as the Maximum Amount.

Table I REPURTING RANGES	Table I	REPORTING RANGES
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Range	Weight Range in Pounds	
Value	From To)
01	0	99
02	100	999
03	1,000	9,999
04	10,000	99,999
05	100,000999,999	9
06	1,000,000	9,999,999
07	10,000,000	49,999,999
80	50,000,000	99,999,999
09	100,000,000	499,999,999
10	500,000,000	999,999,999
11	1 Billion higher than 1 billion	

*Note 5 Page 6

Enter the actual weight in pounds in the shaded space below the response blocks. Do this for both Maximum Amount and Average Daily Amount.

*Note 7 Page 6

EXAMPLE:

You received one large shipment of a solvent mixture last year. The shipment filled five 5,000 - gallon storage tanks. You know that the solvent contains 10% benzene, which is a hazardous chemical.

You figure that 10% of 25,000 gallons is 2,500 gallons. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 2,500 gallons by 7.29 pounds per gallon to get a weight of 18,225 pounds.

Then you look at Table I on page 3 and find that the range value 04 corresponds to 18,225. You enter 04 as the Maximum Amount.

You should write 18.255 in the shaded area.

AVERAGE DAILY AMOUNT

 For each hazardous chemical, estimate the average weight in pounds that was present at your facility during the year.

To do this, total all daily weights and divide by the number of days the chemical was present on the site.

- 2. Find the appropriate range value in Table I.
- 3. Enter this range value as the Average Daily Amount.

EXAMPLE:

The 25,000-gallon shipment of solvent you received last year was gradually used up and completely gone in 315 days. The sum of the daily volume levels in the tank is 4,536,000 gallons. By dividing 4,536,000 gallons by 315 days on-site, you calculate an average daily amount of 14,400 gallons.

You already know that the solvent contains 10% benzene, which is a hazardous chemical. Since 10% of 14,400 is 1,440, you figure that you had an average of 1,440 gallons of benzene. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 1,440 by 7.29 to get a weight of 10,500 pounds.

Then you look at Table I and find that the range value 04 corresponds to 10,500. You enter 04 as the Average Daily Amount.

You should write 10,500 in the shaded area.

*Note 7 Page 6

NUMBER OF DAYS ON-SITE

Enter the number of days that the hazardous chemical was found on-site.

EXAMPLE:

The solvent composed of 10% benzene was present for 315 days at your facility. Enter 315 in the space provided.

STORAGE CODES AND STORAGE LOCATIONS: (AZ TRENDS #6)

List all non-confidential chemical locations in this column, along with storage types/conditions associated with each location. Please note that a particular chemical may be located in several places around the facility. Each row of boxes followed by a line represents a unique location for the same chemical.

Storage Codes: Indicate the types and conditions of storage present.

- Look at Table II. For each location, find the appropriate storage type and enter the corresponding code in the first box.
- b. Look at Table III. Fore each location, find the appropriate storage types for pressure and temperature conditions. Enter the applicable pressure code in the second box. Enter the applicable temperature code in the third box.

Table II - STORAGE TYPES

CODES Types of Storage

- A Above ground tank
- B Below ground tank
- C Tank inside building
- D Steel drum
- E Plastic or non-metallic drum
- F Can
- G Carboy
- H Silo
- I Fiber drum
- J Bag
- K Box
- Cylinder
- M Glass bottles or jugs
- N Plastic bottles or jugs
- O Tote bin
- P Tank wagon
- Q Rail car
- R Other

Table III - PRESSURE AND TEMPERATURE CONDITIONS

CODES Storage Conditions

(PRESSURE)

- 1 Ambient pressure
- 2 Greater than ambient pressure
- 3 Less than ambient pressure
 - (TEMPERATURE)
- 4 Ambient temperature
- 5 Greater than ambient temperature
- 6 Less than ambient temperature but not cryogenic
- 7 Cryogenic conditions

EXAMPLE:

The benzene in the main building is kept in a tank inside the building, at ambient pressure and less than ambient temperature.

Table II shows you that the code for a tank inside a building is C. Table III shows you that the code for ambient pressure is 1, and the code for less than ambient temperature is 6.

You enter C 1 6

Storage Locations:

Provide a brief description of the precise location of the chemical, so that emergency responders can locate the area easily. You may find it advantageous to provide the optional site plan or site coordinates as explained below.

For each chemical, indicate at a minimum the building or lot. Additionally, where practical, the room or area may be indicated. You may respond in narrative form with appropriate site coordinates or abbreviations.

If the chemical is present in more than one building, lot, or area location, continue your responses down the page as needed. If the chemical exists everywhere at the plant site simultaneously, you may report that the chemical is ubiquitous at the site.

OPTIONAL ATTACHMENTS: (AZ TRENDS #8) If you choose to attach one of the following, check the appropriate Attachments box at the bottom of the Tier Two from.

- A site plan with site coordinates indicated for buildings, lots, areas, etc. throughout your facility.
- b. A *list of site coordinate* abbreviations that correspond to buildings, lots, areas, etc. throughout your facility.
- A description of dikes and other safeguard measures for storage locations throughout your facility.

EXAMPLE:

You have benzene in the main room of the main building, and in tank 2 in tank field 10. You attach a site plan with coordinates as follows: main building = G-2, tank field 10 = B-6. Fill in the Storage Location as follows:

B-6 (Tank 2) G-2 (Main Room)

CONFIDENTIAL INFORMATION

Under Title III, Section 324, you may elect to withhold location information on a specific chemical from disclosure to the public. If you choose to do so:

- Enter the word "confidential" in the Non-Confidential Location section of the Tier Two form on the first line of the storage locations.
- On a separate Tier Two Confidential Location Information Sheet, enter the name and CAS number of each chemical for which you are keeping the location confidential.
- Enter the appropriate location and storage information, as described above for nonconfidential locations.

 Attach the Tier Two Confidential Location information Sheet to the Tier Two form. This separates confidential locations from other information that will be disclosed to the public.

*Note 8 Page 6

CERTIFICATION

Instructions for this section are included on page one of these instructions.

FORM R/313 REPORTING REQUIREMENTS: Reporting "trigger" is based on annual chemical consumption <u>not</u> releases. (Report due July 1 of each year)

Facilities in Standard Industrial Classification (SIC) Codes 20XX through 39XX who employ 10 or more personnel and waste generators, regardless of SIC code, who import, manufacture, process, or otherwise use any of more than 600 listed toxic chemicals and/or compounds may be required to annually submit a "Toxic Chemical Release Inventory Reporting Form" (Form R) to the EPA and Arizona Emergency Response Commission, and Toxic Data Report and Pollution Prevention plan to the Arizona Department of Environmental Quality. Toxic chemical thresholds for manufacture/process (to include importation) are currently 25,000 lbs annually; for the otherwise use category, the threshold is 10,000 lbs annually. For more information, call the EPA Hotline at 1-800-535-0202 or the Arizona Emergency Response Commission at (602) 231-6346. For facilities on Tribal lands contact the Commission for guidance. For Pollution Prevention requirements contact ADEQ at 602-207-4205.

If your facility is within the above SIC codes but does not meet employee or toxic chemical thresholds please advise the AZSERC in writing to avoid unwarranted EPA inspection inquiries.

*Note 9, Page 6

RESUBMITTAL PROCEDURES

Recertify corrected reports using red ink. Using the "Resubmittal/Information Package Response Letter," send corrected copies to the:

- (1) Arizona Emergency Response Commission
- (2) Applicable Local Emergency Planning Committee
- (3) Fire department/district with facility jurisdiction.

An <u>original</u> signature is required as described on page 1 of these instructions under CERTIFICATION.

ARIZONA SUPPLEMENTAL GUIDANCE

FOR

TIER TWO INSTRUCTIONS (EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY FORM)

- NOTE 1: Submission of the Tier Two form to the Arizona Emergency Response Commission (AERC), Tribal Emergency Response Commission (TERC), Local Emergency Planning Committee (LEPC) and Fire Department/District with jurisdiction over the facility is required by Federal and/or Arizona Revised Statutes.
- NOTE 2: Reference Section 1910.1200(b) of the OSHA regulations (29 CFR). The following exemptions have been provided:
 - (I) Any hazardous waste as such term is defined by the Solid Waste Disposal Act as amended (42 U.S.C. 6901 et seq.) when subject to regulations issued under that Act;
 - (II) Tobacco or tobacco products;
 - (III) Wood or Wood products;
 - (IV) "Articles" defined under §1910.1200(b) as a manufactured item:

Which is formed to a specific shape or design during manufacture;

Which has end use function(s) dependent in whole or in part upon the shape or design during end use; and

Which does not release, or otherwise result in exposure to a hazardous chemical under normal conditions of use.

- (V) Food, drugs, cosmetics or alcoholic beverages in a retail establishment which are packaged for sale to consumers;
- (VI) Foods, drugs or cosmetics intended for personal consumption by employees while in the work place.
- (VII) Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, where the employer can demonstrate it is used in the work place in the same manner as normal consumer use, and which use results in a duration and frequency of exposure which is not greater than exposures experienced by consumers;
- (VIII) Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), when it is in solid, final form for direct administration to the patient (i.e., tablets, pills).
- NOTE 3: The list of Extremely Hazardous Substances (EHS) can be found in appendices in 40 CFR part 355 or call the EPA Hotline 1-800-535-0202 or the AERC at 602 231-6346.
- NOTE 4: <u>Standard Industrial Classification</u> (SIC) code, information is available from the AZ Department of Economic Security Research Administration Division at (602) 542-3871 ask for "ES 202".

Dun & Bradstreet information is available at (602) 631-6870 or 1-800-456-5892.

- **NOTE 5:** Pay particular attention to the reporting ranges give in Table I on page 3.
- **NOTE 6:** Material Safety Data Sheets often provide this specific information.
- **NOTE 7:** Enter the actual weight in pounds in the shaded space below the response blocks, to assist in determining planning requirements and accurate coding. At a minimum, provide this for max daily amount.

- NOTE 8: Tier Two Confidential Location Information Sheet is available upon request to the Arizona Emergency Response Commission.
- NOTE 9: Significant penalties have been levied against Arizona facilities failing to comply with <u>all</u> reporting sections of the Emergency Planning and Community Right-to-Know Act. Additionally, refer to A.R.S. 49 Chapter 5, Article 4.
- NOTE 10: Specify the fire department/district (not necessarily the local fire station) with jurisdiction for your facility. This should be the same agency to whom you submit copies of MSDS'/Chemical lists, TIER TWO reports and, if applicable, facility emergency plans.
- NOTE 11: Commentary: Environmental and Emergency/Contingency Planning requirements, as you well know can be extremely complex. The Tier Two Emergency and Hazardous Chemical Inventory is but one of the four reporting requirements (listed below) that your facility may be subject to under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA).

EPCRA, also known as SARA (Superfund Amendments & Reauthorization Act of 1986) Title III, and Arizona Revised Statutes Title 26, Chapter 2, Article 3 (AZ EPCRA) require certain business/facility owners/operators who import, manufacture, process, sell, use and/or store chemicals, including some ores and metals, above designated levels to:

actively participate in the Emergency Planning process;

provide emergency notification in the event of a chemical release;

annually submit "Tier Two" chemical inventory reports; and/or

annually report on a "Form R" the use/release of certain toxic chemicals.

AZ EPCRA specifically requires owners/operators to develop and submit a facility emergency response plan if on site chemicals are classified as Extremely Hazardous Substances and are in amounts at/above respective threshold planning quantities. Call the Arizona Emergency Response Commission at (602) 231-6346 for further details.

NOTE 12: You should also be aware of requirements under the Clean Air and Pollution Prevention Acts as well as Storm water rules as they are implemented federally and by Arizona. Contact the AZ Department of Environmental Quality at (602) 207-2300 for appropriate referral within that department.

ARIZONA EMERGENCY RESPONSE COMMISSION

TIER TWO HELPFUL NOTES

Upper Right Hand Corner: Number pages approximately

Facility Identification: Physical address needed

SIC Code: Mandatory entry. See Note 4, Page 6

Dun & Bradstreet: Mandatory entry. See Note 4, Page 6

Owner/Operator Name: Also Point of Contract for reports if different than

Owner/Operator.

Reporting Period: Do not forget the report is normally for the <u>previous</u> calendar

year.

CAS#: Right justify using leading edge zeros (e.g. 008006-61-9)

Chemical Name: Check All That Apply:

Minimum of 2 blocks must be checked pure/mix;

solid/liquid/gas. Also if it's a powdered solid (particle size

less than 100 microns) indicate that.

EHS Name: From the EHS list. Be sure to check EHS block.

Physical & Health Hazards: Check all that apply. MSDS will help you.

Inventory - Max Daily Amount: Use the correct code from page 3 of Tier Two Instructions.

Enter the actual weight in pounds in the space between Max

Daily and Ave Daily blocks.

Storage Codes & Locations: Use correct codes, see page 4 -- Pressure the Temperature.

Certification: Put total number of pages. Re-read page 1 of Instructions,

Certification.